The EU Artificial Intelligence Act

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Definition

“a machine-based system designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments” Art. 3 (1)
The Risk-based approach

- URAIs
- High-risk
- Limited Risk
- General Purpose AI
- Minimal or No Risk
Unacceptable Risk AI Systems

- Social credit scoring
- Emotion recognition systems in work and educational contexts.
- AI that exploits people's vulnerabilities (e.g. age, gender, disability)
- Systems that manipulate behaviour
- Biometric categorisation using sensitive characteristics
- Predictive policing
- “Real-time” biometric information identification.
High-risk AI Systems

Annex II

Annex III
Obligations for providers of HRAIs

- Fundamental rights impact assessment and conformity assessment
- Registration in a public database
- Implementation of risk management system and quality management system

- Data governance (e.g. bias mitigation, representative training data, etc.)
- Transparency (e.g. instructions for use, technical documentation record keeping, etc.)
- Human oversight (e.g. explainability, auditable logs, human-in-the-loop, etc.)

- Accuracy, robustness and cyber security (e.g. testing and monitoring, etc.)
Limited Risk

Transparency obligations for providers and deployers of certain AI systems

• AI systems intended to directly interact with natural persons (e.g. AI chatbots)
• AI systems, including GPAI systems, generating synthetic audio, image, video or text content (e.g. Midjourney, DALL-E)
• Emotion recognition systems or biometric categorisation system (e.g. ShareArt)
• Deep fakes
General Purpose AI models

**General purpose AI model**’ means an AI model, including when trained with a large amount of data using self-supervision at scale, that displays **significant generality** and is capable to competently perform a wide range of distinct tasks regardless of the way the model is placed on the market and that can be integrated into a variety of downstream systems or applications. This does not cover AI models that are used before release on the market for research, development and prototyping activities (Art 3(44b))

and

A general purpose AI model shall be classified as **general-purpose AI model with systemic risk** if it meets any of the following criteria:

- (a) it has **high impact capabilities** evaluated on the basis of appropriate technical tools and methodologies, including indicators and benchmarks;
- (b) based on a decision of the Commission, ex officio or following a qualified alert by the scientific panel that a general purpose AI model has capabilities or impact equivalent to those of point (a) (Art. 52a)
Minimal or no risk AIs

AI Pacts
Timeline

- **2024**: Formal adoption and publication
- **+ 6 months (pef)**: Prohibitions
- **+ 24 months (pef)**: All rules including high-risks Annex III

- **Political Agreement**: 08.12.2023
- **Entry into force**: + 20 days
- **General purpose AI governance**: + 12 months (pef)
- **High-risk Annex II**: + 36 months (pef)
Thank you for your attention!

If you have any questions, contact me at katerina.yordanova@kuleuven.be